

Antibacterial activity of major secondary metabolites found in four species of edible green macroalgae genus *Caulerpa*

Abstract

Major secondary metabolites in four members of green macroalgae genus *Caulerpa*, *C. lentilifera*, *C. racemosa*, *C. microphysa* and *C. sertularoides*, were investigated. Crude methanolic extract of these algae yield two secondary metabolites; (i) caulerpin (1), and (ii) phytol (2), in various concentrations. Isolated compounds were identified based on spectroscopic data such as $^1\text{H-NMR}$, $^{13}\text{C-NMR}$, optical rotation value, LREIMS and HREIMS data. *C. lentilifera* gave 15% caulerpin and 14% phytol; *C. racemosa* gave 5% caulerpin and 4% phytol, *C. microphysa* gave 2% caulerpin and 8% phytol, and *C. sertularoides* gave 8% caulerpin and 20% phytol. Caulerpin (1) showed moderate antibacterial activity against 8 species of bacterial isolated from algal surface.